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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,969	11/18/2003	James D. Ralph	F-305	5368
51640	7590	01/19/2006	EXAMINER	
SPINE MP LERNER, DAVID, et al. 600 SOUTH AVENUE WEST WESTFIELD, NJ 07090			BLANCO, JAVIER G	
			ART UNIT	PAPER NUMBER
			3738	

DATE MAILED: 01/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/715,969	<b>Applicant(s)</b> RALPH ET AL.	
	<b>Examiner</b> Javier G. Blanco	<b>Art Unit</b> 3738	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 8-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicants' amendment of claims 8, 10-14, 19, and 20 in the reply filed on October 20, 2005 is acknowledged.

### ***Claim Objections***

2. Claim 13 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Independent claim 8 claims the opposing ends as being connected to the first plate, and the curvate central portion as being connected to the second plate.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 8-11 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Ratron (US 5,676,702 A).

As seen in Figures 1-5, Ratron discloses an intervertebral spacer device comprising: (i) a first plate (first plate 11) having a first inner surface and a first outer surface, (ii) a second plate (second plate 10 + partition 12; see column 1, lines 66-67) having a first inner surface and a first outer surface, wherein the inner surface of the first plate opposes the inner surface of the second plate, and (iii) at least one arched strip spring (partition 13 + partition 14) disposed between the inner surfaces of the first and second plates, said at least one arched strip spring having flat opposing ends coupled with said first plate, and a curvate central portion (see column 2, lines 5-18) between the opposing ends that is coupled with said second plate.

5. Claims 8-13, 20, and 21 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Pisharodi (US 6,610,093).

As seen in Figures 3, 4B, and 4C, Pisharodi discloses an intervertebral spacer device comprising: (i) a first plate (**first interpretation:** disk 26D; **second interpretation:** either one of upper bracket 22 or lower bracket 24) having a first inner surface and a first outer surface, (ii) a second plate (upper bracket 22 or lower bracket 24) having a first inner surface and a first outer surface, wherein the inner surface of the first plate opposes the inner surface of the second plate, and (iii) at least one arched strip spring (leaf-type springs 64B; see column 3, lines 40-52; column 4, lines 51-63) disposed between the inner surfaces of the first and second plates, said at least one arched strip spring having flat opposing ends coupled with said first plate, and a curvate central portion between the opposing ends that is coupled with said second plate.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pisharodi (US 6,610,093) in view of Bryan et al. (US 6,156,067).

Pisharodi discloses the invention as claimed (see 102(e) rejection) except for particularly disclosing the use of threaded fasteners. However, this is already known in the art. For example, Bryan et al. disclose (see Figures 6, 9, and 10) the subject matter of using threaded fasteners (e.g., screw 362; screw 92) in order to attach a spring (e.g., endoprosthetic vertebral body 320; ligament 250) to intervertebral plates (see plates 322, 324). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have combined the teaching of using threaded fasteners, as taught by Bryan et al., with the at least one arched strip spring of Pisharodi, in order to attach said spring to intervertebral plates.

8. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pisharodi (US 6,610,093) in view of Stubstad et al. (US 3,867,728).

Pisharodi discloses the invention as claimed (see 102(e) rejection above). Although Pisharodi discloses the external plate surfaces as convex to match the contour of the opposing bone surfaces, and the desirability of tissue ingrowth, he/she did not particularly disclose said external plate surfaces as having a deflectable/deformable surface (or mesh) thereon. However, this is well known in the art. For example, Stubstad et al. teach an intervertebral spacer device

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comprising external plate surfaces having a deflectable/deformable (see column 8, lines 46-49; column 9, lines 14-17), convex (see Figure 4; see column 13, lines 24-26) wire mesh (e.g., Dacron mesh 21 and/or Dacron mesh 20; see column 8, lines 6-10 and lines 43-59; column 9, lines 10-18) thereon in order for the external plate surfaces to adapt/match to any small irregularities in the vertebral surfaces and to enable deeper tissue ingrowth on said external plate surfaces (see columns 8 and 9). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have combined the teaching of an intervertebral spacer device comprising external plate surfaces having a deflectable/deformable, convex wire mesh thereon, as taught by Stubstad et al., with the intervertebral spacer device of Pisharodi, in order for the external plate surfaces to adapt/match to any small irregularities in the vertebral surfaces and to enable deeper tissue ingrowth on said external plate surfaces.

9. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ratron (US 5,676,702 A) in view of Stubstad et al. (US 3,867,728).

Ratron discloses the invention as claimed (see 102(b) rejection above). Although Ratron discloses the external plate surfaces as convex to match the contour of the opposing bone surfaces, and the desirability of tissue ingrowth, he/she did not particularly disclose said external plate surfaces as having a deflectable/deformable surface (or mesh) thereon. However, this is well known in the art. For example, Stubstad et al. teach an intervertebral spacer device comprising external plate surfaces having a deflectable/deformable (see column 8, lines 46-49; column 9, lines 14-17), convex (see Figure 4; see column 13, lines 24-26) wire mesh (e.g., Dacron mesh 21 and/or Dacron mesh 20; see column 8, lines 6-10 and lines 43-59; column 9, lines 10-18) thereon in order for the external plate surfaces to adapt/match to any small

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irregularities in the vertebral surfaces and to enable deeper tissue ingrowth on said external plate surfaces (see columns 8 and 9). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have combined the teaching of an intervertebral spacer device comprising external plate surfaces having a deflectable/deformable, convex wire mesh thereon, as taught by Stubstad et al., with the intervertebral spacer device of Ratron, in order for the external plate surfaces to adapt/match to any small irregularities in the vertebral surfaces and to enable deeper tissue ingrowth on said external plate surfaces.

### *Conclusion*

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javier G. Blanco whose telephone number is 703-605-4259. The examiner can normally be reached on M-F (9:00 a.m.-6:00 p.m.), first Friday of the bi-week off.

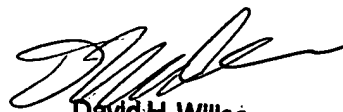
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on 703-308-2111. The fax phone numbers for the organization where this application or proceeding is assigned is 703-872-9306 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

JGB



January 12, 2006



David H. Willse  
Primary Examiner